Dehcho Boreal Caribou Study Progress Report, April 2011

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Photo Credit Danny Allaire - ENR

Photo Credit
John Nagy

The Dehcho boreal caribou study was initiated in 2004 with the deployment of ten satellite collars on adult female caribou at the request of, and after consultation with Sambaa K'e Dene Band (SKDB) of Trout Lake. Extensive consultations in response to requests from other First Nations since have increased the study area and number of First Nations partners in this study. From 2005-2010 a total of 44 satellite, 29 GPS, and four VHF collars have been deployed on adult female boreal caribou (see Appendix 1). A more detailed background history of the program, the collars used, and the deployment procedures can be found in Larter and Allaire (2010). This report provides updated results and information for another year of data.

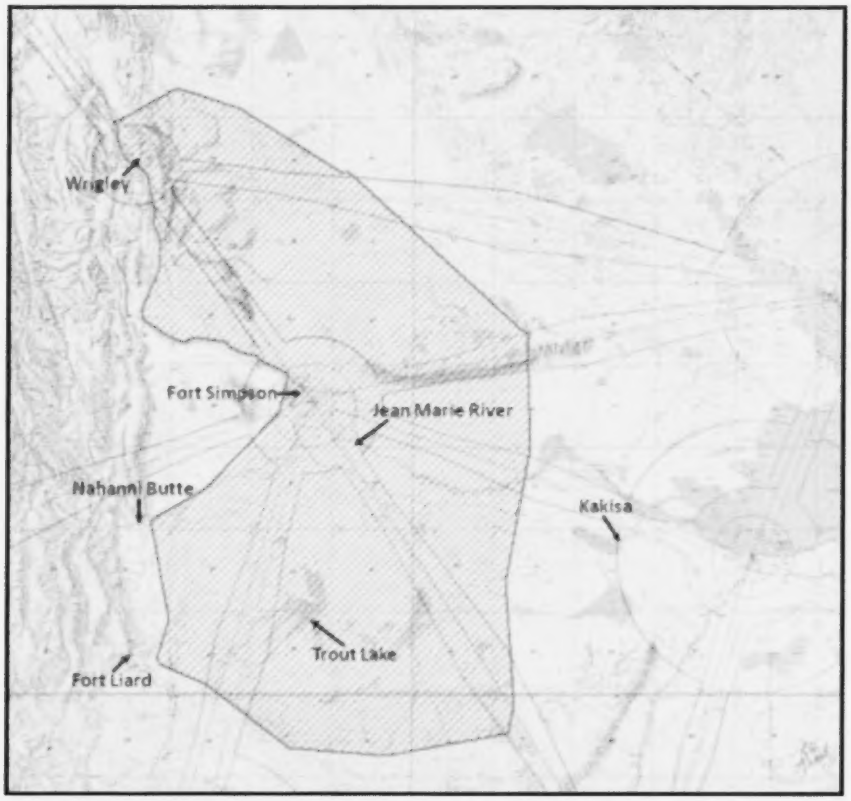


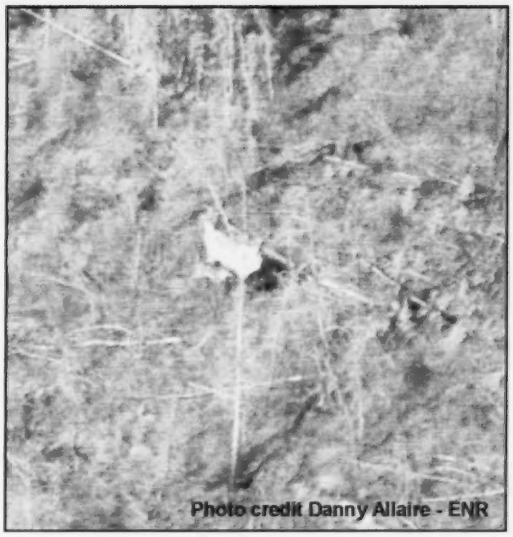
Figure 1. The Dehcho boreal caribou study area, based upon the locations of satellite collared adult female boreal caribou.

Home Ranges

For all caribou that we had locations for over a minimum 12 month period (n=61), we calculated the 100% minimum convex polygon (MCP) as the annual home range. This is a line connecting all of the outside points where a specific caribou was located. For 31 of the 61 collared females we had locations for ≥24 months, and we used these to calculate a cumulated range (Fig. 2). Mean home range size was 2986km^2 (range 205-12,281km^2; median 2765km^2). Seven caribou ranged into northeastern British Columbia and one into northwestern Alberta (Fig. 2). Two boreal caribou collared in a northeastern British Columbia study have been located southeast of Trout Lake (Brad Culling pers. comm.). A caribou originally collared in the Cameron Hills study area, to the east of this study area (Johnson 2007), was re-captured and collared in February 2007 near Trainor Lake; this collar released in June 2010. We calculated its home range based solely on locations after it was re-collared. Home range sizes reported are similar to those reported for the Cameron Hills and Hay River Lowlands (Kelly and Cox 2011) and Gwich'in study areas (means of *ca.* 3000km^2; J. Nagy pers. comm.).

Figure 2. Annual home ranges (100% MCP) of **61** collared female boreal caribou. Red, females with satellite collars, black, females with GPS collars.

Calving and Calving Events



Female boreal caribou spread out during the calving period, likely to avoid predation (Fig. 3). Daily movement rates drop dramatically from *ca.* 6km/day two days prior to calving, to *ca.* 0.2km/day on the day of calving, and remain at ≤1km/day for about a week post-calving (Nagy 2011). By analyzing the daily movement patterns of collared female caribou we can determine when and where a female boreal caribou calved or not. The peak of calving period for boreal caribou in southern NT is May 7-21 (Nagy 2011). By using movement data to determine calving dates, we no longer have to fly survey(s) during the calving period thus reducing disturbance and we also get a more accurate assessment of the number of calves born because we do not risk surveying before calves are born or after newborn calves may have died.

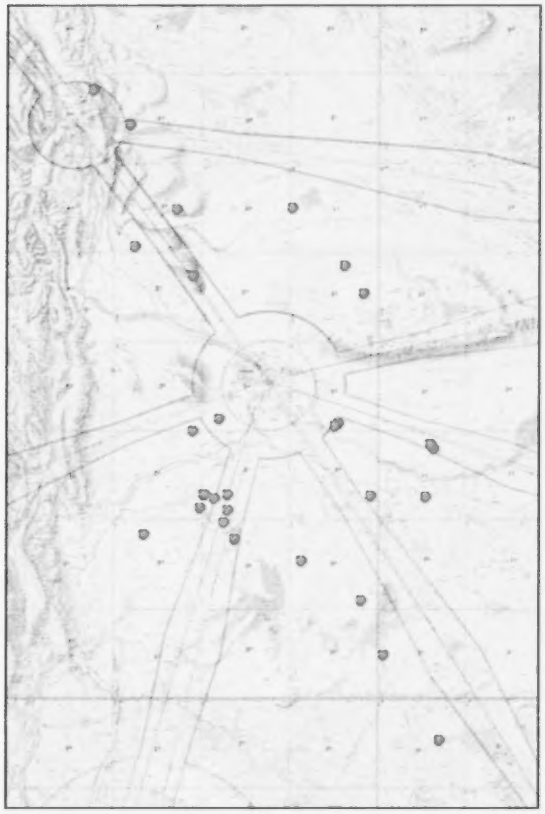


Figure 3. Calving locations of collared female boreal caribou ● during 11-24 May, 2010. Note the wide dispersal throughout the range.

We were able to determine calving events for 31 collared boreal female in 2010. Only one female, caribou 176, did not have a calf based on her movement data. There was an additional collared female, however she was equipped with a VHF collar, and we needed to see her with a calf to verify her calving in 2010. During the 2011 classification survey she was observed with a calf of the 2010 year. Therefore, 31 of 32 collared females calved during 2010. Calves for the 30 GPS or satellite collared females were born from May 11-24, 2010; the calving date for the VHF collared female could not be determined. On May 14, the largest number of calves was born (8 of 30) and by May 19, 93% (28 of 30) of the calves were born (Fig. 4).

Based upon the 23 collared females that calved in May 2010 and survived with active collars to be observed in the March 2011 classification survey, calf survival was *ca.* 70% (16/23). Four collared females (136, 137, 138 and 149) calved during May 2010. Their collars released on schedule in June 2010 so their calves could not be included in the

estimate of survival because we could not locate the cows in the March 2011 classification survey.

There have been questions about whether or not individual female boreal caribou calve in the same or close-by location every year. Some collared females have shown more fidelity (returning to the same area) than others but observation is based upon data from only three consecutive years of calving. Some of the more recently deployed collars could potentially provide movement data from five calving seasons. This would give us better information on the fidelity of individual females to calving locations.

Female caribou can live up to 17 years and can conceive at 16 years of age (Larter and Allaire 2009). Boreal caribou, like other deer, have a high probability of conceiving after reaching maturity at 2-3 years old. Based upon the level of progesterone in blood serum from the collared females, 91% (79 of 87) were pregnant; four (4.6%) were not pregnant and the remaining four were borderline (Table 1). We determined that one borderline caribou (176) did not have a calf based upon analysis of movement data.

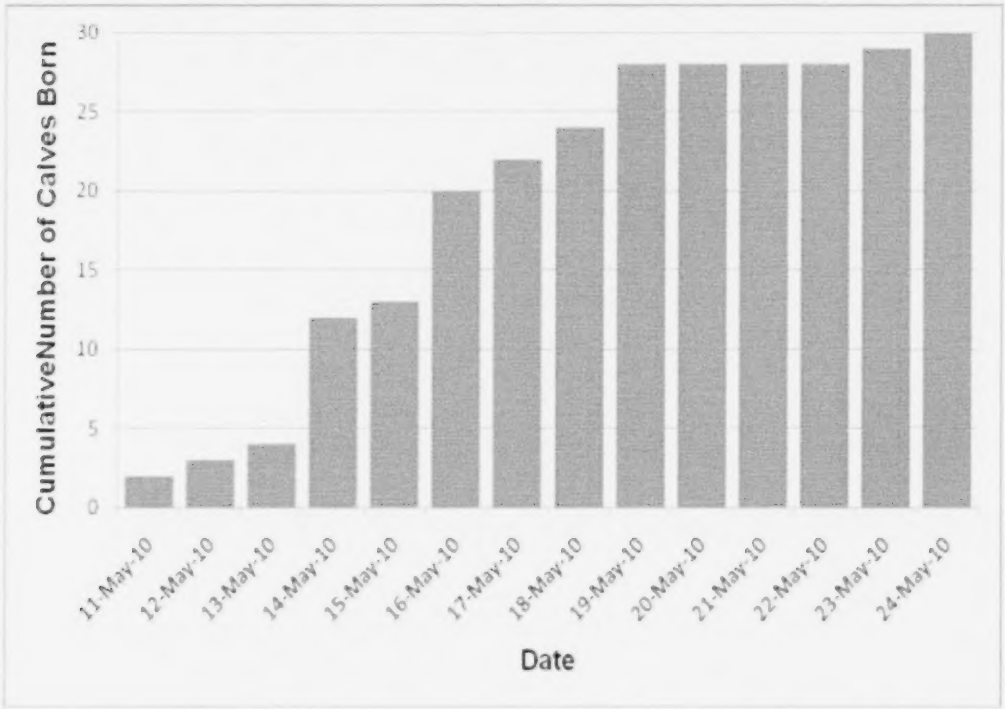


Figure 4. The number of calves born in successive days to 30 collared female boreal caribou during the May, 2010 calving period.

Table 1. The number of blood samples indicating pregnant, borderline, and not pregnant for collared boreal caribou females over time. Pregnancy determination based upon progesterone levels in blood serum.

	2004	2005	2006	2007	2008	2009	2010
Pregnant	10	12	10	16	7	7	17
Borderline	0	0	2	1	0	0	1
Not Pregnant	0	1	1	0	1	1	0
Total	10	13	13	17	8	8	18

February/March Classification Survey

This survey is conducted with a helicopter because we need to see all collared caribou and determine the sex/age class of all other caribou we see. Caribou are classified into calves (9-10 months old), yearlings (21-22 months old), females (≥32 months old), and males (≥32 months old), based upon antler size and shape and animal size. There is the potential for some yearlings to be mistakenly classified as females or males ≥32 months old. Photographs of caribou groups are taken to verify classification and the presence of calves. We assume that calves of the year observed in this late winter survey are recruited into the population. We also report other wildlife observed during surveys (Table 2). The survey was conducted March 1-2, 2011, covering a flight line of *ca.* 1655km; 152 boreal caribou were classified (Table 2). Fewer caribou were classified this year, likely because we had fewer females with active collars than in previous years (Table 2). Caribou frequented more heavily forested areas this year than in previous years and we observed more fresh bedding sites where we were unable to locate caribou than in other years. The South Slave region also conducts a boreal caribou classification survey in the Cameron Hills and Hay River Lowlands study areas in late February. Danny Allaire participated in these surveys during 2010 and 2011. During the survey on February 24-25, 2011, two females collared as part of the Dehcho study and their associated nine caribou, were classified. These animals have been included in our survey results and calculations reported here (Table 2).

Sixteen of 24 collared females were observed with calves. Based upon the total number of females and calves observed, we estimated 44.6 calves per 100 adult females. This is higher than in previous years (Table 2) and is higher than that reported for caribou in the Cameron Hills and Hay River Lowlands study areas (Kelly and Cox 2011) but lower than what has been reported for the Gwich'in study areas in the Lower Mackenzie Valley (J. Nagy pers. comm.). Wolf predation on boreal caribou is negligible in the Lower Mackenzie Valley unlike in the Cameron Hills, Hay

River Lowlands and Dehcho study areas (Johnson 2007; Larter and Allaire 2010; Kelly and Cox 2011; Nagy 2011).

Table 2. The number of caribou classified and other wildlife observed during caribou sex/age classification surveys in 2006-2011 conducted in February-March.

	2006	2007	2008	2009	2010	2011
Number of active collars	24	33	35	37	39[1]	24[2]
Total number of caribou observed	170	216	241	291	235	161
Number of females (≥32 mo.)	94	114	145	160	128	74
Number of calves (8-10 mo.)	27	26	34	50	45	33
Number of yearlings (20-22 mo.)	13	6	1	1	1	2
Number of males (≥32 mo.)	35	70	61	80	61	50
Number unknown sex/age caribou	1	0	0	0	0	2
Number of calves per 100 females	28.7	22.8	23.4	31.3	35.2	44.6
Number of moose observed	18	38	15	31	23	22
Number of wolves observed	2	1	0	0	0	0
Flight line length (km)	1200	1600	1700	2000	1750	1655

[1] One collared animal located during the South Slave classification survey.
[2] Two collared animals located during the South Slave classification survey.

Relocation Flights

Four relocation flights were made between March 2, 2010 and March 2, 2011, primarily to relocate caribou 134, the lone remaining female caribou equipped with a VHF collar, and the satellite collars which were only providing VHF transmissions. The collar on caribou 134 is expected to cease transmitting in July 2011. One flight was associated with a moose survey (see appendix 2).

Released Collars and Caribou Deaths

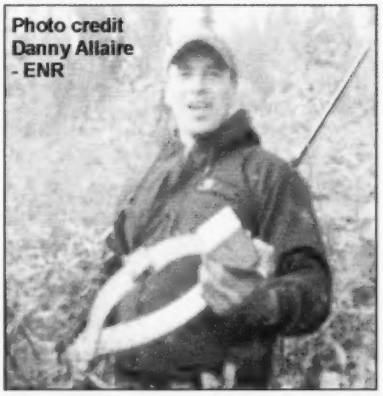


Figure 5. Local harvester with retrieved collar (Ochre River).

Six collared caribou died between April 1, 2010 and March 31, 2011. Collars were released as scheduled from nine others. We retrieved three of six collars from caribou that died but were unable to retrieve any released collars as they were widely distributed in inaccessible areas. Collars were retrieved from the shoreline of Trout Lake (179), the shoreline of the Mackenzie/Ochre River (126; Fig. 5) and the shoreline of the Liard River (163). We had limited access to fire operations helicopters this summer, which greatly reduced the opportunity to retrieve downed collars.

A Wrigley resident (Eddie Gargan) turned in a collar from a harvested caribou (122) in April 2011. This collar was one of the original collars deployed and was one of the few collars we have had very spotty satellite transmissions from. It ceased to transmit in June 2009. This collar had not been equipped with a release mechanism. With this find we needed to recalculate previous estimates of adult survival and population rate of increase (λ) back 2007-08 because this caribou had been alive for the past four years. When this caribou was harvested it was in very good shape, with good fat

supplies for the time of year. There was no evidence of warble flies or of hair loss from the collar (E. Gargan pers. comm.).

Since March 2004, 40 collared caribou have died. Predation by wolves and black bears has been the main cause of death. There is strong evidence that 30 caribou (75%) were killed by wolves and one was killed by a black bear. Six (15%) caribou were harvested, two died of causes likely associated with old age, and the cause of one caribou is unknown because we could not visit the site before the collar stopped transmitting. Most deaths (n=31; 78%) occur between late-March and mid-July in any year; similar to that reported in the Cameron Hills and Hay River Lowlands study areas (Johnson 2007).

Boreal caribou use areas ≤400m from anthropogenic linear features less than other areas, and they travel faster when they encounter them (Nagy 2011) likely because these features provide travel corridors for predators. The remains of 12 of 30 (40%) predated caribou were located ≤400m from the nearest anthropogenic linear feature.

Teeth have been retrieved from 13 of 40 caribou that died and were aged at Matson's Lab (Missoula, Montana). Age is determined have been counting cementum annuli on teeth (the incisor is best), similar to counting the rings of a tree (Fig. 6). June 1 has historically been used as the birth date for caribou (Matson 1981); however, this is being adjusted based upon the results of this study. Caribou ranged in age at death from five to 17 years (Fig. 7).

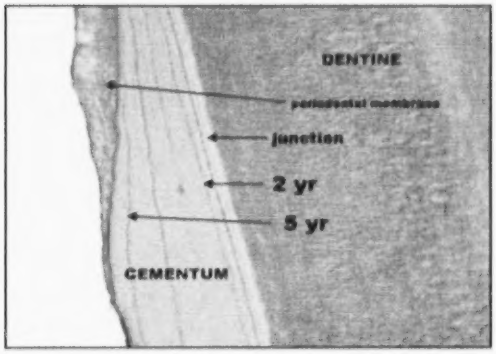


Figure 6. A stained section of a tooth root. The dark blue lines are stained cementum.

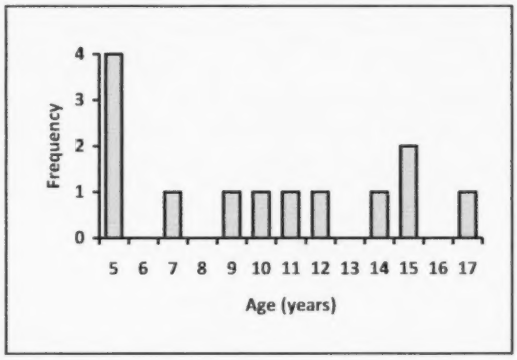


Figure 7. The ages of 13 female boreal caribou at the time of their death. Age was determined by counting cementum annuli.

Adult Female Survival

Adult female survival varies annually (Table 3; Fig. 8), but based upon the number of collared caribou that have died during the course of the study to date (Kaplan and Meier 1958; Pollock et al. 1989), our best estimate (geometric mean) of adult female survival for the Dehcho from 2005/06 to 2010/11 is 77.5%. We did not include the estimates from 2004/05 due to a small sample size (ten collars) and the restricted area of deployment. Adult females collared in the north Dehcho have a somewhat higher estimated survival than females collared in the south Dehcho, 82.1% versus 74.5%. Nagy (2011) found that boreal caribou populations were more viable in areas with fewer seismic lines, and where there were larger patches of secure unburned habitat. Our estimates of adult female survival support this because there are fewer seismic lines, and more, larger patches of unburned habitat in the north versus the south Dehcho. The adult female survival rate we report is lower in comparison to estimates from studies in the Cameron Hills (81% average from five years) and Hay River Lowlands (86% average from seven years; Kelly and Cox 2011) and Gwich'in (≥95% average from three years; Nagy 2011) areas. Low adult female survival reduces the population rate of increase.

Estimated Population Rate of Increase

We estimated the population rate of increase (λ) measured from April 1 to March 31 for six successive years for all caribou collared throughout the entire study area. We made separate estimates for caribou collared north and south of the Mackenzie River (Table 3). We based the λ estimate on annual female survival and the ratio of calves per 100 adult females (ca:cow) reported in March (Hatter and Bergerud 1991). Of note is that prior to 2009, the March ratio of ca:cow was estimated from all animals observed during the classification surveys. From 2009 to present, we had a larger sample size of collared and therefore known females. Because it is these females that are used to estimate adult survival, and adult females are harvested, we have derived ca:cow from just the collared females. We feel this is the most appropriate estimation of recruitment assuming that the collared females are a representative sample of all females. A rate of increase, or λ, of one indicates population stability, <1 indicates population decrease, and >1 indicates population increase. Small sample sizes affect the confidence of the estimate. For both years 2009/10 and 2010/11, λ was >1, likely because female survival had remained consistent while the number of calves seen in late-winter had increased (Table 3; Fig. 8). The higher estimated annual rate of increase over the past two years is encouraging. However, the average estimated rate of increase over the past 6 years (λ = 0.96) still remains <1. If we had started with a population of 1000 adult female caribou in 2004, and used our estimated annual population rates of increase there would be 804 adult females today (Fig. 9). There is no question that the higher calf recruitment over the past two years has had a positive influence on the boreal caribou population in the study area.

The population rate of increase (λ) we report (averaged over six years) is similar to the Hay River Lowlands (λ = 0.96 averaged over seven years) but greater than the Cameron Hills (λ = 0.87 averaged over five years) study areas, (Kelly and Cox 2011), even though adult female survival is higher in both South Slave (SS) study areas. Calf recruitment in SS study areas is much lower than in the Dehcho, which

appears to be lowering λ in the SS regardless of adult female survival >80%. The population rate of increase reported for the Gwich'in areas over two to three years was λ = 1.08 – 1.20 (Nagy 2011), where female survival and late winter ca:cow are higher.

Table 3. The estimated annual population rate of increase (λ) for 6 successive years. Rates for the south Dehcho are calculated for caribou collared south of the Mackenzie River, rates for the north Dehcho for caribou collared north of the Mackenzie River.

South Dehcho

Year	Female Survival Rate	Ca:100 Females	Rate of Increase (λ)
2005-2006	0.6250	0.2587	0.7179
2006-2007	0.6429	0.2616	0.7396
2007-2008	0.9375	0.2558	1.0750
2008-2009	0.7391	0.4444	0.9503
2009-2010	0.8500	0.4667	1.1087
2010-2011	0.7143	0.5555	0.9890

North Dehcho

Year	Female Survival Rate	Ca:100 Females	Rate of Increase (λ)
2005-2006	0.6000	0.3318	0.7193
2006-2007	0.7500	0.1999	0.8333
2007-2008	0.8235	0.1937	0.9118
2008-2009	1.0000	0.3333	1.2000
2009-2010	0.8235	0.6667	1.2353
2010-2011	1.0000	0.7333	1.5789

Dehcho Combined

Year	Female Survival Rate	Ca:100 Females	Rate of Increase (λ)
2005-2006	0.6191	0.2881	0.7232
2006-2007	0.6923	0.2286	0.7817
2007-2008	0.8788	0.2335	0.9949
2008-2009	0.8000	0.3611	0.9763
2009-2010	0.8378	0.5238	1.1351
2010-2011	0.8571	0.6667	1.2857

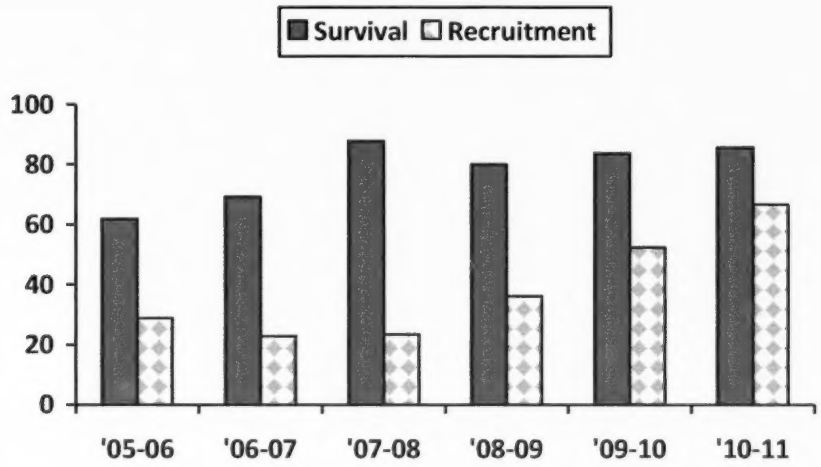


Figure 8. Adult female survival (%) and calves:100 adult females in March (recruitment) for the Dehcho study area from 2005-06 to 2010-2011, based on radio-collared female caribou.

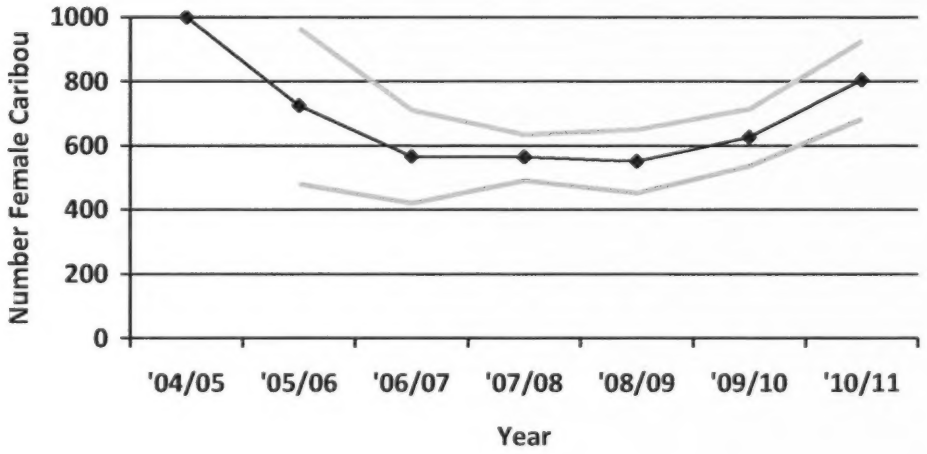


Figure 9. The estimated number of female caribou in each year of the study starting with a population of 1000 and using the annual rates of increase (λ) calculated for the 6 successive years. The green and red lines represent the upper and lower 95% confidence intervals.

Disease and Parasites

Baseline health data collected from the Dehcho, Cameron Hills and Hay River Lowlands study areas from 2003-2007 show that boreal caribou are healthy, with low numbers of parasites and antibodies being found. None of the diseases or parasites found are a cause for concern; all 22 blood samples submitted for *Brucella* testing were negative. More details can be found in Johnson *et al.* (2010).

Present and Future of the Study

We continue to work co-operatively with other researchers conducting boreal caribou studies. We assisted with the boreal caribou classification survey of the North Cameron Hills in March 2011. One of the caribou collared in the Dehcho study was located by biologists from northern Alberta. When the collar released in June 2010, ENR staff from the South Slave region retrieved the collar. Nic Larter participated as a science advisor for phase 2 of the *Environment Canada Boreal Caribou Critical Habitat Science Review*. Data from this study was incorporated into a territorial-wide analysis which resulted in a recent PhD thesis (Nagy 2011) and two publications (Johnson et al. 2010; Nagy et al. *in press*).

Nine collars released on schedule during 2010. Four more collars will release in July 2011. All retrieved collars are being refurbished for future deployment with duty cycles which will allow us to determine calving events remotely. At the request of our First Nation partners, we did not deploy collars on female boreal caribou in February 2011. However, given the current number of active collars on caribou, our First Nation partners are aware that there will be the need to deploy collars in February 2012 in order to maintain enough active collars to monitor the population. At the 5th biannual Dehcho regional wildlife workshop in Fort Simpson (October 2010) future collaring needs were discussed. It was suggested that a minimum of 30 collars should be maintained throughout the study area. A current working proposal is for a minimum of one collar to be made available for each of our First Nation partners for deployment in areas of their choosing.

Deliverables

ENR provides an annual progress report on the Dehcho boreal caribou study to its First Nations partners and to the Biophysical Program. The report is posted on the ENR website. ENR continues to provide quarterly maps to its First Nations partners. The maps show the ranges used by each individual collared caribou over the previous three months.

Posters and presentations were made and presented at the 5th biannual Dehcho regional wildlife workshop, October 2010 in Fort Simpson and the 13th North American Caribou Workshop in Winnipeg, October 2010.

Acknowledgements

We thank our First Nations partners for their continued and ongoing support of this study: Sambaa K'e Dene Band (Trout Lake), Fort Simpson Métis Local, Liidlii Kue First Nations (Fort Simpson), Jean Marie River First Nation, Pehdzeh Ki First Nation (Wrigley), Nahanni Butte Dene Band, Acho Dene Koe Band (Fort Liard), and Ka'a'gee Tu First Nation (Kakisa). We especially thank Mr. Eddie Gargan of Wrigley for turning in the collar from the caribou he harvested. By turning in this collar we were able to adjust our estimates of many population parameters with the most accurate information possible. This highlights the cooperative nature of the Dehcho Boreal Caribou Study.

We thank Dr. John Nagy for assistance with data analysis, stimulating discussions, and providing data and results of territorial-wide analyses of boreal caribou location data. Deborah Johnson and Allicia Kelly provided comparative data. We thank Forest Management, ENR, Fort Simpson, for providing access to helicopter time. CLS America provided all satellite location data. Matson's Lab aged all the teeth. Simpson Air, Wolverine Air, and Great Slave Helicopters provided aircraft and skillful piloting for various aspects of the study. Wesley Pellisey and Aboriginal Aquatic Resource and Ocean Mgmt program (AAROM) provided boats for collar retrievals this year. Funding for the past year came from Wildlife Division, ENR, the Western Northwest Territories Biophysical Study (GNWT) and Canadian Wildlife Service (Environment Canada).

Personal Communications

Brad Culling, Diversified Environmental Services, Fort St. John, BC
John Nagy, PhD., University of Alberta
Eddie Gargan, harvester from Wrigley

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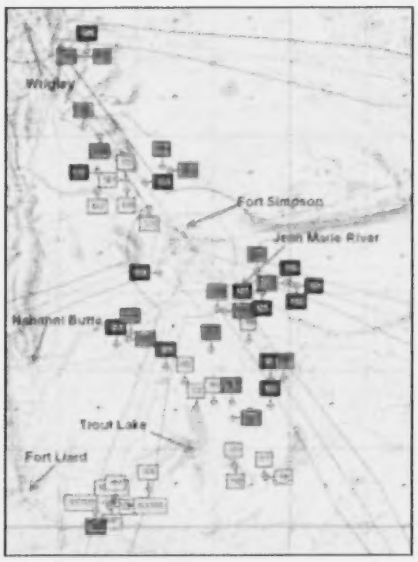
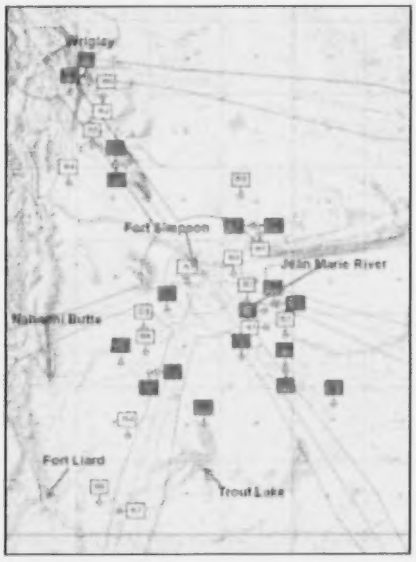
Appendix 1. The number and type of collars deployed on adult females (Table) and deployment locations for each year (Figures).

Date caribou collared	Satellite (ST-20-3610 or TAW-4610H)	GPS (TGW-3680 or TGW-4680)	VHF (Mod 600)	Totals
March 2004	10			10
March 2005	13			13
January 2006	9		4	13
January 2007	8	9		17
February 2008	4	4		8
February 2009	1	7		8
February 2010	9	9		18
TOTAL	54	29	4	87



Locations of 51 female boreal caribou collared in , , 2006, 2007 (see colour for locations).



Locations of 36 female boreal caribou collared in yellow 2008, 2009, 2010 (see colour for locations).

Appendix 2. Brief descriptions of relocation flights and collar retrievals conducted from April 2010 to March 2011.

All relocation flights.

- 14 June, fixed-winged aircraft to relocate caribou 134 & 163.
- 3 August, fixed-winged aircraft to relocate caribou 134, 136, 137, 143, 163 & 185.
- 23 November, fixed-winged aircraft to relocate caribou 134, 137, 143, 175 & 178 during moose survey.
- 31 January, fixed-winged aircraft to relocate caribou 134 & 143.

All collar retrievals from dead animals.

- 7 June, drove to Wrigley, boated to Ochre River, retrieved caribou collar 126.
- 5 August, boated from Fort Simpson to Beaver Dam on the Liard River, retrieved caribou collar 163.
- 22 February, drove to Trout Lake, snowmobiled to the north end of Trout Lake, retrieved caribou collar 179.

All flights to retrieve released collars.

- No released collars were retrieved this year.

Photo credit John Nagy.

Appendix 3. A timeline of each collared caribou since 2004. The collar type (GPS, Sat = Satellite, VHF) is noted as well as whether most recently only VHF signals are being received.

Caribou #186 (GPS)
- 27 Feb/10 collared
- 2 Mar/10 seen with calf
- 2 Mar/11 seen in group of 5 with calf

Caribou #185 (GPS)
- 27 Feb/10 collared
- 2 Mar/10 seen alone, collar is resetting
- 3 Aug/10 located, no visual
- 2 Mar/11 seen in group of 4 with calf

Caribou #184 (GPS)
- 26 Feb/10 collared
- 1 Mar/10 seen in group of 6 with calf
- 1 Mar/11 seen in group of 7 with calf

Caribou #183 (Sat)
- 26 Feb/10 collared
- 1 Mar/10 seen in group of 6 without calf
- 1 Mar/11 seen in group of 13 without calf

Caribou #182 (GPS)
- 26 Feb/10 collared
- 1 Mar/10 seen with cow
- 1 Mar/11 seen in group of 7 with calf

Caribou #181 (Sat)
- 26 Feb/10 collared
- 1 Mar/10 seen in group of 3 without calf
- 1 Mar/11 seen in group of 4 with calf

Caribou #180 (Sat)
- 26 Feb/10 collared
- 1 Mar/10 seen in group of 8 with calf
- 1 Mar/11 seen in group of 5 with calf

Caribou #179 (GPS, died)
- 25 Feb/10 collared
- 2 Mar/10 seen in group of 11 with calf
- Died 25 Nov/10
- 31 Jan/11 located, suspect dead
- 22 Feb/11 collar retrieved by snow machine

Caribou #178 (Sat, died)
- 25 Feb/10 collared
- 1 Mar/10 seen in group of 3 with calf
- Died (ceased movements) 8 Oct/10
- 23 Nov/10 no caribou at signal location
- 1 Mar/10 no signal at location

Caribou #177 (GPS)
- 25 Feb/10 collared
- 2 Mar/10 seen alone
- 25 Feb/11 seen with calf

Caribou #176 (Sat)
- 25 Feb/10 collared
- 2 Mar/10 seen in group of 3 without calf
- 25 Feb/11 seen in group of 7 without calf

Caribou #175 (Sat, died)

- 25 Feb/10 collared
- 2 Mar/10 seen in group of 5 without calf
- Died (ceased movements) 6 Sept/10
- 23 Nov/10 no caribou at signal location

Caribou #174 (GPS)

- 24 Feb/10 collared
- 1 Mar/10 seen with cow
- 1 Mar/11 seen in group of 5 with calf

Caribou #173 (GPS)

- 24 Feb/10 collared
- 1 Mar/10 seen in group of 8 with calf
- 1 Mar/11 seen in group of 5 without calf

Caribou #172 (Sat)

- 24 Feb/10 collared
- 1 Mar/10 seen with calf
- 1 Mar/11 seen in group of 3 with calf

Caribou #171 (Sat)

- 24 Feb/10 collared
- 1 Mar/10 seen in group of 13 with #160 with calf
- 1 Mar/11 seen in group of 7 with calf

Caribou #170 (Sat)

- 23 Feb/10 collared
- 2 Mar/10 seen in group of 7 with #137 with calf
- 2 Mar/11 seen in group of 7 without calf

Caribou #169 (GPS)

- 23 Feb/10 collared
- 2 Mar/10 seen alone
- 2 Mar/11 seen with calf

Caribou #168 (GPS)

- 19 Feb/09 collared
- 2 Mar/09 seen in group of 5 without calf
- 1 Mar/10 seen in group of 4 with calf
- 1 Mar/11 seen in group of 9 with calf

Caribou #167 (GPS, died)

- 18 Feb/09 collared
- 3 Mar/09 seen in group of 7 without calf
- 21 Mar/09 locations became stationary, suspect wolf predation
- 5 Jun/09 collar retrieved

Caribou #166 (GPS)

- 19 Feb/09 collared
- 2 Mar/09 seen in group of 10 with #155 without calf
- 1 Mar/10 seen in group of 4 without calf
- 1 Mar/11 seen alone

Caribou #165 (GPS)

- 19 Feb/09 collared with calf
- 2 Mar/09 seen in group of 14 with calf
- 1 Mar/10 seen in group of 10 with calf
- 1 Mar/11 seen in group of 9 with calf

Caribou #164 (GPS)

- 18 Feb/09 collared
- 3 Mar/09 seen in group of 4 without calf
- 2 Mar/10 seen in group of 3 without calf
- 2 Mar/11 seen with calf

Caribou #163 (GPS, died)

- 19 Feb/09 collared
- 3 Mar/09 seen in group of 9 without calf
- 1 Mar/10 seen with calf
- Died 15 April/10
- 14 Jun/10 signal from under ice on Liard River
- 3 Aug/10 collard seen, ice has melted
- 5 Aug/10 collar retrieved by boat

Caribou #162 (GPS, harvested)

- 19 Feb/09 collared
- 2 Mar/09 seen in group of 11 without calf
- 5 May/09 shot by harvester
- 24 May/09 collared retrieved

Caribou #161 (Sat, no SAT only VHF)

- 18 Feb/09 collared
- 2 Mar/09 seen in group of 5 without calf
- 2 Mar/10 seen with cow
- 12 Nov/10 locations have stopped transmitting

Caribou #160 (Sat)

- 17 Feb/08 collared with calf
- 3 Mar/08 seen in group of 5 with calf
- 28 May/08 no visual, too much static
- 2 Mar/09 seen in group of 14 without calf
- 1 Mar/10 seen in group of 13 with #171 with calf
- 1 Mar/11 seen alone

Caribou #159 (Sat)

- 16 Feb/08 collared
- 4 Mar/08 seen in group of 24 without calf
- 21 Apr/08 located with 134
- 28 May/08 seen without calf
- 3 Mar/09 seen in group of 8 without calf
- 1 Mar/10 seen in group of 10 without calf
- 2 Mar/11 seen in group of 16 including #134 without calf

Caribou #158 (Sat, died)

- 17 Feb/08 collared
- 3 Mar/08 seen with cow
- 28 May/08 seen with calf
- 2 Mar/09 seen in group of 6 with calf
- Died 10 May/09
- 2 Jun/09 collar retrieved

Caribou #157 (Sat, released)

- 17 Feb/08 collared
- 3 Mar/08 seen in group of 5 without calf
- 23 May/08 lost satellite signal
- 29 May/08 seen in group of 3 with calf
- 2 Mar/09 seen in group of 5 with calf
- 1 Mar/10 seen in group of 5 without calf
- 30 Sep/10 collar released

Caribou #156 (GPS, died)

- 18 Feb/08 collared with calf
- 4 Mar/08 seen in group of 4 with calf
- 29 May/08 seen without calf
- 3 Mar/09 seen in group of 14 with calf
- Died 13 April/09
- 13 Jul/09 collar retrieved

Caribou #155 (GPS, harvested)

- 17 Feb/08 collared
- 3 Mar/08 seen in group of 6 without calf
- 28 May/08 seen with calf
- 2 Mar/09 seen in group of 10 with #166 without calf
- Died 29 Jul/09
- 21 Sep/09 collar retrieved by boat

Caribou #154 (GPS)

- 17 Feb/08 collared
- 5 Mar/08 seen in group of 19 without calf
- 29 May/08 seen with calf
- 4 Mar/09 seen in group of 5 with calf
- 2 Mar/10 seen in group of 7 with calf
- 2 Mar/11 seen with calf

Caribou #153 (GPS)

- 16 Feb/08 collared with calf
- 4 Mar/08 seen in group of 4 without calf
- 29 May/08 seen without calf
- 2 Mar/09 seen in group of 5 with calf
- 2 Mar/10 seen in group of 4 with calf
- 2 Mar/11 seen in group of 6 without calf

Caribou #152 (GPS, died)

- 23 Jan/07 collared
- 27 Feb/07 seen in group of 6 without calf
- 30 May/07 seen with calf
- 4 Mar/08 seen with cow
- 30 May/08 seen with calf
- 3 Mar/09 seen in group of 10 without calf
- 2 Mar/10 seen in group of 9 with calf
- Died 25 Mar/10
- 21 May/10 tried to relocate by helicopter, too much water
- 22 Feb/11 tried to relocate with snowshoes, no signal

Caribou #151 (GPS, harvested)

- 22 Jan/07 collared
- 26 Feb/07 seen in group of 6 without calf
- 29 May/07 seen with calf
- 3 Mar/08 seen in group of 8 without calf
- 28 May/08 seen with calf
- Died 8-10 Aug/08 by Fish Lake
- 2 Jun/09 collar retrieved

Caribou #150 (GPS, harvested)

- 22 Jan/07 collared
- 26 Feb/07 seen in group of 2 without calf
- 29 May/07 seen with calf
- 3 Mar/08 seen with cow
- Died 26-28 May/08 likely shot by harvester
- 17 Jun/08 collar retrieved

Caribou #149 (GPS, released)

- 24 Feb/07 collared
- 27 Feb/07 seen in group of 7 without calf
- 30 May/07 seen with calf
- 4 Mar/08 seen in group of 10 without calf
- 29 May/08 seen with calf
- 3 Mar/09 seen in group of 9 with calf
- 3 Mar/10 seen in group of 12 without calf
- 2 Jun/10 collar released
- 8 Oct/10 collar retrieved by SS staff

Caribou #148 (Sat, released)

- 24 Jan/07 collared
- 26 Feb/07 seen in group of 12 without calf
- 30 May/07 seen without calf
- 4 Mar/08 seen with calf
- 29 May/08 seen with calf
- 2 Mar/09 seen in group of 3 without calf
- 30 Sep/09 collar released
- 2 Mar/10 collar located, did release as scheduled

Caribou #147 (Sat, died)

- 22 Jan/07 collared
- 26 Feb/07 seen in group of 8 without calf
- 30 May/07 seen without calf
- 3 Mar/08 seen in group of 9 without calf
- 28 May/08 seen with calf
- Died 20-26 Jun/08
- 17 Aug/09 collar retrieved

Caribou #146 (Sat, released)

- 21 Jan/07 collared
- 27 Feb/07 see in group of 11 with calf
- 30 May/07 seen with calf
- 4 Mar/08 seen in group of 4 with calf
- 29 May/08 seen without calf
- 2 Jul/08 lost satellite signal
- 3 Mar/09 seen in group of 3 with #108 without calf
- 2 Mar/10 seen in group of 4 with calf
- 30 Sep/10 collar released

Caribou #145 (Sat, released)

- 21 Jan/07 collared
- 27 Feb/07 seen in group of 3 without calf
- 30 May/07 seen without calf
- 3 Mar/08 seen in group of 4 with calf
- 29 May/08 seen with calf
- 2 Jul/08 lost satellite signal
- 2 Mar/09 seen in group of 5 with calf
- 1 Mar/10 seen in group of 4 with calf
- 30 Sep/10 collar released

Caribou #144 (Sat, harvested)

- 23 Jan/07 collared
- 26 Feb/07 seen in group of 10 without calf
- Died 5-6 Apr/07 shot by harvester
- 12 Apr/07 collar retrieved

Caribou #143 (Sat, released)

- 21 Jan/07 collared
- 26 Feb/07 seen in group of 6 without calf
- 29 May/07 seen with calf
- 20 Nov/07 seen in group of 4
- 04 Sep/07 lost satellite
- 4 Mar/08 seen in group of 6 without calf
- 26 Mar/08 located, no visual
- 21 Apr/08 located, no visual
- 29 May/08 not located, no signal
- 3 Mar/09 seen in group of 2 without calf
- 14 May/09 located, no visual
- 1 Jun/09 seen with calf
- 9 Jul/09 located, no visual
- 12 Aug/09 located, no visual
- 2 Sept/09 located, no visual
- 28 Oct/09 located, no visual
- 22 Nov/09 located, no visual
- 22 Feb/10 located, no visual
- 2 Mar/10 seen in group of 4 without calf
- 3 Aug/10 located, no visual
- 30 Sep/10 collar released
- 23 Nov/10 no caribou at location
- 31 Jan/11 no caribou at location

Caribou #142 (Sat, unknown status)

- 22 Jan/07 collared
- 26 Feb/07 seen in group of 10 without calf
- 29 May/07 seen with calf
- 3 Mar/08 seen in group of 4 without calf
- Died before 9 May/08
- 28 May/08 went to last known satellite location but no VHF transmission, likely underwater

Caribou #141 (Sat, died)

- 23 Jan/07 collared
- 26 Feb/07 seen in group of 2 without calf
- Died 27-31 May/07
- 13 Jul/07 collar retrieved

Caribou #140 (GPS, died)

- 24 Jan/07 collared
- 26 Feb/07 seen in group of 3 without calf
- 30 May/07 seen without calf
- Died 30 Oct-4 Nov/07
- 25 Apr/08 collar retrieved

Caribou #139 (GPS, died)

- 21 Jan/07 collared
- 27 Feb/07 seen in group of 6 without calf
- 30 May/07 seen in group of 4 with calf
- 3 Mar/08 seen with calf
- 29 May/08 seen with calf
- 2 Mar/09 seen in group of 3 without calf
- Died 6 July/09
- 10 Aug/09 collar retrieved

Caribou #138 (GPS, released)

- 23 Jan/07 collared
- 27 Feb/07 seen in group of 4 without calf
- 30 May/07 seen without calf
- 4 Mar/08 seen in group of 8 without calf
- 29 May/08 seen with calf
- 3 Mar/09 seen in group of 17 without calf
- 2 Mar/10 seen in group of 3 without calf
- 2 Jun/10 collar released

Caribou #137 (GPS, released)

- 23 Jan/07 collared
- 27 Feb/07 seen in group of 5 without calf
- 29 May/07 seen with calf
- 5 Mar/08 seen with calf
- 29 May/08 seen in group of 3 with calf
- 3 Mar/09 seen in group of 13 with calf
- 2 Mar/10 seen in group of 7 with #170 with calf
- 2 Jun/10 collar released
- 3 Aug/10 located, no visual
- 23 Nov/10 located, no visual

Caribou #136 (GPS, released)

- 23 Jan/07 collared
- 26 Feb/07 seen in group of 5 without calf
- 29 May/07 seen without calf
- 5 Mar/08 seen in group of 19 without calf
- 29 May/08 seen with calf
- 7 Mar/09 seen in group of 7 without calf
- 2 Mar/10 seen in group of 3 without calf
- 2 Jun/10 collar released
- 3 Aug/10 located, no visual

Caribou #135 (VHF, died)

- 21 Jan/06 collared
- 1 Mar/06 seen in group of 4 without calf
- 30 May/06 without calf
- 28 Sep/06 no visual
- 23 Feb/07 seen in group of 6 without calf
- Died 23-28 May/07
- 31 May/07 collar retrieved

Caribou #134 (VHF)

- 21 Jan/06 collared
- 1 Mar/06 seen in group of 3
- 29 May/06 seen with calf
- 16 Sep/06 seen in group of 4
- 26 Feb/07 seen in group of 2 without calf
- 29 May/07 seen without calf
- 15 Feb/08 seen in group of 13 without calf
- 4 Mar/08 seen in group of 24 without calf
- 26 Mar/08 located, no visual
- 21 Apr/08 located with 159
- 28 May/08 seen with calf
- 3 Mar/09 seen in group of 9 with calf
- 14 May/09 located, no visual
- 1 Jun/09 seen with calf
- 9 Jul/09 located, no visual
- 12 Aug/09 located, no visual
- 2 Sep/09 located, no visual
- 28 Oct/09 located, no visual
- 22 Nov/09 located, no visual
- 22 Feb/10 located, no visual
- 1 Mar/10 seen in group of 3 with calf
- 14 Jun/10 located, no visual
- 3 Aug/10 located, no visual
- 23 Nov/10 located, no visual
- 31 Jan/11 located, no visual
- 1 Mar/11 seen in group of 16 including #159 with calf

Caribou #133 (VHF, unknown status)

- 21 Jan/06 collared
- 1 Mar/06 seen with calf
- 30 May/06 seen with calf
- 23 Jan/07 seen in group of 10 without calf
- 26 Feb/07 seen in group of 3 without calf
- 29 May/07 seen with calf
- Unable to relocate since Dec/08

Caribou #132 (VHF, released)

- 22 Jan/06 collared
- 1 Mar/06 seen in group of 9 with calf
- 29 May/06 approx. location not pregnant
- 16 Sep/06 seen in group of 2 without calf
- 26 Feb/07 seen in group of 3 without calf
- 30 May/07 seen with calf
- 15 Feb/08 seen in group of 5 without calf
- 4 Mar/08 seen in group of 5 without calf
- 26 Mar/08 located, no visual
- 21 Apr/08 located, no visual
- 29 May/08 not located
- 1 Mar/09 programmed release date
- 2 Mar/09 located collar in mortality mode, no caribou seen

Caribou #131 (Sat, released)

- 22 Jan/06 collared
- 1 Mar/06 seen with calf
- 29 May/06 without calf
- 16 Sep/06 seen in group of 3 cows without calf
- 21 Jan/07 seen in group of 5 with calf
- 27 Feb/07 seen in group of 5 without calf
- 30 May/07 seen with calf
- 03 Mar/08 seen in group of 8 with calf
- 29 May/08 seen with calf
- 2 Mar/09 seen in group of 4 with calf
- 15 Apr/09 collar released

Caribou #130 (Sat, died)

- 22 Jan/06 collared
- 1 Mar/06 seen in group of 7 without calf
- 29 May/06 without calf
- Died 1-7 Jul/06
- 23 Aug/06 collar retrieved

Caribou #129 (Sat, died)

- 20 Jan/06 collared
- 1 Mar/06 seen in group of 6 without calf
- 30 May/06 seen with calf
- 16 Sep/06 with calf
- 21 Jan/07 seen in group of 4 with calf
- 26 Feb/07 seen in group of 10 with calf
- 29 May/07 seen with calf
- 05 Mar/08 seen without calf
- Died 18-22 May/08
- 29 May/08 collar retrieved

Caribou #128 (Sat, released)

- 20 Jan/06 collared
- 2 Mar/06 seen in group of 5 without calf
- 30 May/06 seen in group of 4 with calf
- 16 Sep/06 seen in group of 3 without calf
- 27 Feb/07 seen in group of 5 without calf
- 29 May/07 seen with calf
- 04 Mar/08 seen in group of 10 with calf
- 29 May/08 seen with calf
- 22 Oct/08 collar finished transmitting
- 3 Mar/09 seen in group of 3 with calf
- 2 Mar/10 seen in group of 7 without calf
- 3 Mar/10 collar released

Caribou #127 (Sat, died)

- 22 Jan/06 collared
- 1 Mar/06 seen in group of 7 with calf
- 29 May/06 seen with calf
- Died 1-5 Jul/06, likely wolf predation
- 16 Sep/06 confirm carcass
- 23 Oct/06 collar retrieved

Caribou #126 (Sat, died)

- 21 Jan/06 collared
- 1 Mar/06 seen in group of 5 with yearling
- 30 May/06 seen with calf
- 26 Feb/07 seen in group of 13 without calf
- 29 May/07 seen without calf
- 03 Mar/08 seen in group of 14 without calf
- 28 May/08 seen with calf
- 2 Mar/09 seen in group of 5 without calf
- Died 28 Apr/09
- 7 Jun/11 collar retrieved by boat

Caribou #125 (Sat, died)

- 22 Jan/06 collared
- 1 Mar/06 seen in group of 16 with yearling
- 29 May/06 seen with small calf
- Died 12-15 Jul/06, likely wolf predation
- 16 Sep/06 no visual
- 23 Oct/06 collar retrieved

Caribou #124 (Sat, died)

- 20 Jan/06 collared
- 2 Mar/06 seen in group of 7 without calf
- Died 13-19 May/06, likely wolf predation
- 23 Aug/06 collar retrieved

Caribou #123 (Sat, died)

- 20 Jan/06 collared
- 2 Mar/06 seen in group of 4 with calf
- 29 May/06 without calf
- 16 Sep/06 seen in group of 3
- Died 1-5 Nov/06 on Trainor Lake
- 15 Feb/07 locate collar in ice
- 27 Feb/07 collar retrieved

Caribou # 122 (Sat, harvested)

- 4 Mar/05 collared
- 21 Mar/05 seen in group of 3
- 30 Mar/05 seen in group of 3
- 1 Jun/05 seen alone without calf
- 4 Jun/05 no visual
- 23 Sep/05 no visual
- 10 Oct/05 no visual
- 31 Nov/05 no satellite signal
- 4 Apr/05 got satellite signal back
- 30 May/05 seen without calf
- 24 Nov/06 no satellite signal
- 15 Jun/07 collar went off air finishing transmissions
- 15 Apr/11 collar handed in by harvester

Caribou #121 (Sat, died)

- 4 Mar/05 collared
- 21 Mar/05 seen in group of 3
- Died 26-27 Mar/05 predated by wolves
- 30 Mar/05 collar retrieved

Caribou #120 (Sat, released)

- 4 Mar/05 collared
- 21 Mar/05 seen in group of 13
- 30 Mar/05 seen in group of 3
- 1 Jun/05 no visual
- 4 Jun/05 seen alone without calf
- 23 Sep/05 seen in group of 14
- 10 Oct/05 no visual
- 16 Jan/06 seen in group of 3
- 1 Mar/06 seen in group of 5
- 30 May/06 without calf
- 26 Feb/07 seen in group of 10 without calf
- 30 May/07 seen without calf
- 7 Dec/07 seen in group of 4 without calf
- 3 Mar/08 seen in group of 4 without calf
- 28 May/08 seen with calf
- 7 Oct/08 transmissions from collar ceased
- 2 Mar/09 see in group of 6 without calf
- 3 Mar/09 collar released
- 29 Aug/09 collar retrieved

Caribou # 119 (Sat, released)

- 4 Mar/05 collared
- 21 Mar/05 seen in group of ≥8
- 30 Mar/05 no visual
- 1 Jun/05 seen alone without calf
- 23 Sep/05 no visual
- 10 Oct/05 no visual
- 16 Jan/06 in group of 5 without calf
- 1 Mar/06 in group of 4
- 30 May/06 with calf
- 22 Jan/07 in group of 3 with calf
- 26 Feb/07 in group of 11 with calf
- 29 May/07 seen without calf
- 3 Mar/08 seen with cow
- 28 May/08 seen with calf
- 10 Sep/08 collar finished transmitting
- 2 Mar/09 seen in group of 5 without calf
- 3 Mar/09 collar released
- 2 Jun/09 collar retrieved

Caribou # 118 (Sat, died)

- 4 Mar/05 collared
- 21 Mar/05 seen in group of 10
- 30 Mar/05 seen in group of 9
- 1 Jun/05 no visual
- 4 Jun/05 no visual
- Died 15-21 Jun/05, likely wolf predation
- 6 Sep/05 collar retrieved

Caribou #117 (Sat, died)

- 3 Mar/05 collared
- 10 Apr/05 not checked on
- 5 May/05 not checked on
- 31 May/05 seen alone without calf
- 10 Jun/05 seen in thick brush
- 23 Sep/05 seen in group of at least 4
- 5 Oct/05 not checked on
- 26 Jan/06 seen in group of 4 with calf
- 2 Mar/06 seen in group of 5 with calf
- Died 17-21 Apr/06
- 28 Aug/06 collar retrieved

Caribou #116 (Sat, released)

- 3 Mar/05 collared
- 10 Apr/05 not checked on
- 5 May/05 not checked on
- 31 May/05 seen alone without calf
- 10 Jun/05 no visual
- 23 Sep/05 seen in group of 3
- 5 Oct/05 not checked on
- 26 Jan/06 seen in group of 7 with calf
- 2 Mar/06 seen in group of 4 with calf
- 29 May/06 seen with calf
- 16 Sep/06 seen in group of 2 without calf
- 23 Jan/07 seen in group of 12 without calf
- 27 Feb/07 seen in group of 6 without calf
- 30 May/07 seen in group of 3 with calf
- 4 Mar/08 seen with bull
- 29 May/08 seen with calf
- 13 Oct/08 collar stopped satellite transmissions
- 3 Mar/09 seen in group of 17 without calf
- 3 Mar/09 collar released
- 7 Jul/09 collar retrieved

Caribou #115 (Sat, released)

- 3 Mar/05 collared
- 10 Apr/05 seen in group of 3
- 5 May/05 not checked on
- 31 May/05 seen alone without calf
- 10 Jun/05 not checked on
- 23 Sep/05 no visual
- 5 Oct/05 seen in group of 2 without calf
- 2 Mar/06 seen in group of 9 without calf
- 30 May/06 seen in group of 2 without calf
- 16 Sep/06 seen in group of 4 without calf
- 27 Feb/07 seen in group of 4 without calf
- 29 May/07 seen with calf
- 04 Mar/08 seen with 2 cows
- 30 May/08 seen with calf
- 1 Oct/08 collar stopped satellite transmissions
- 4 Mar/09 seen in group of 3 with calf
- 3 Mar/09 collar released
- 10 Aug/09 collar retrieved

Caribou #114 (Sat, released)

- 3 Mar/05 collared
- 10 Apr/05 seen in group of 9
- 5 May/05 not checked on
- 31 May/05 no visual
- 10 Jun/05 seen alone without calf
- 23 Sep/05 no visual
- 5 Oct/05 not checked on
- 2 Mar/06 seen in group of 6 without calf
- 29 May/06 seen in group of 3 without calf
- 16 Sep/06 seen in group of 3 without calf
- 27 Feb/07 seen in group of 6 without calf
- 30 May/07 seen with without calf
- 4 Mar/08 seen in group of 7 without calf
- 29 May/08 seen with calf
- 3 Jul/09 collar stopped satellite transmissions
- 3 Mar/09 seen in group of 13 with calf
- 3 Mar/09 collar released
- 1 Jun/09 collar retrieved

Caribou #113 (Sat, died)

- 3 Mar/05 collared
- 10 Apr/05 seen in group of 4
- 5 May/05 not checked on
- 31 May/05 no visual
- 10 Jun/05 seen alone without calf
- Died 2-8 Sep/05 likely wolf predation
- 5 Oct/05 collar retrieved

Caribou #112 (Sat, released)

- 3 Mar/05 collared
- 10 Apr/05 seen with calf
- 5 May/05 not checked on
- 31 May/05 seen with calf
- 10 Jun/05 seen with calf
- 23 Sep/05 no visual
- 5 Oct/05 not checked on
- 1 Mar/06 seen in group of 6 with calf
- 30 May/06 seen in group of 4 with calf
- 16 Sep/06 seen with calf
- 27 Feb/07 seen in group of 5 with calf
- 29 May/07 seen with calf
- 5 Mar/08 seen with 2 bulls
- 29 May/08 not located
- 30 Jun/08 located, no visual
- 22 Oct/08 collar stopped satellite transmissions
- believe collar released from caribou Mar/09
- 3 Mar/09 collar released
- 6 Jul/09 collar retrieved

Caribou #111 (Sat, released)

- 3 Mar/05 collared
- 10 Apr/05 not checked on
- 5 May/05 seen in group of 2
- 31 May/05 seen with calf
- 10 Jun/05 not checked on
- 23 Sep/05 seen in group of 5 with calf
- 5 Oct/05 not checked on
- 1 Mar/06 seen in group of 9 without calf
- 29 May/06 seen with calf
- 16 Sep/06 seen in group of 3
- 24 Jan/07 seen in group of 14
- 27 Feb/07 seen in group of 4 with calf
- 30 May/07 seen with calf
- 4 Mar/08 seen in group of 8 with calf
- 28 May/08 seen with calf
- 11 Nov/08 collar stopped satellite transmissions
- 3 Mar/09 seen in group of 11 with calf
- 3 Mar/09 collar released
- 10 Jul/09 collar retrieved

Caribou #110 (Sat, died)

- 5 Mar/05 collared
- 10 Apr/05 not checked on
- 5 May/05 seen alone without calf
- 31 May/05 seen alone without calf
- 10 Jun/05 not checked on
- Died 5-11 Jun/05 likely wolf predation
- 29 Jul/05 collar retrieved

Caribou #109 (Sat, died)

- 1 Apr/04 collared
- 29 May/04 no visual
- 3 Jun/04 not checked on
- 22 Sep/04 seen in group of 4 without calf
- 25 Jan/05 not checked on
- 31 May/05 seen with calf
- 19 Jun/05 seen with calf
- 23 Sep/05 no visual
- 5 Oct/05 seen in group of 3 with calf
- Died 22-25 Apr/06, likely wolf predation
- 23 Aug/06 collar retrieved

Caribou #108 (Sat, observed alive, no Sat or VHF active)

- 1 Apr/04 collared
- 29 May/04 seen alone without calf
- 3 Jun/04 no visual
- 22 Sep/04 seen in group of 3 without calf
- 25 Jan/05 seen in group of 4 without calf
- 31 May/05 no visual
- 10 Jun/05 no visual
- 19 Jun/05 seen with calf
- 23 Sep/05 no visual
- 5 Oct/05 seen in group of 5 with calf
- 2 Mar/06 seen in group of 3 with yearling
- 30 May/06 seen with calf
- 23 Jan/06 seen in group of 5 with calf
- 27 Feb/07 seen in group of 11with calf
- 30 May/07 seen in group of 3 with calf
- 15 Jun/07 collar stopped satellite transmissions
- 3 Mar/09 seen in group of 3 with #146, no VHF active

Caribou #107 (Sat, died)

- 1 Apr/04 collared
- 29 May/04 no visual
- 3 Jun/04 not checked
- 22 Sep/04 seen in group of 3 with calf
- 25 Jan/05 not checked
- Died 14-17 Apr/05 likely wolf predation
- 4 May/05 collar retrieved

Caribou #106 (Sat, died)

- 30 Mar/04 collared
- 29 May/04 no visual
- 3 Jun/04 seen in group of 2 with calf
- 22 Sep/04 seen in group of 7 without calf
- 25 Jan/05 seen in group of 5 without calf
- 31 May/05 seen alone without calf
- 23 Sep/05 seen in group of 2 without calf
- Died 21-24 Nov/05, likely wolf predation
- 30 May/06 collar retrieved

Caribou #105 (Sat, died)

- 30 Mar/04 collared
- 29 May seen in group of 3 with calf
- 3 Jun/04 not checked on
- 22 Sep/04 no visual
- 25 Jan/05 seen in group of 3 without calf
- 31 May/05 seen alone without calf
- 19 Jun/05 seen alone without calf
- 23 Sep/05 no visual
- 2 Mar/06 seen in group of 11 without calf
- 23 Aug/06 collar retrieved

Caribou #104 (Sat, died)

- 29 Mar/04 collared
- 29 May/04 seen in group of 3 without calf
- 3 Jun/04 seen in group of 3 without calf
- 22 Sep/04 no visual
- 25 Jan/05 not checked on
- Died 19-27 Apr/05, death probably related to old age
- 4 May/05 collar retrieved

Caribou #103 (Sat, died)

- 1 Apr/04 collared
- 29 May/04 seen in group of 3 with calf
- 3 Jun/04 not checked on
- 22 Sep/04 no visual
- 25 Jan/05 not checked on
- Died 25-30 Apr/05, likely wolf predation
- 4 May/05 collar retrieved

Caribou #102 (Sat, died)

- 29 Mar/04 collared
- Died 14-15 May/04, wolf predation
- 3 Jun/04 collar retrieved

Caribou # 101 (Sat, died)

- 30 Mar/04 collared
- Died during month of May/04, likely wolf predation
- 9 Aug/04 collar retrieved

Caribou # 100 (Sat, no Sat or VHF active)

- 29 Mar/04 collared
- 29 May/04 seen in group of 3 without calf
- 3 Jun/04 seen alone without calf
- 22 Sep/04 no visual
- 25 Jan/05 seen in group of 11, without calf
- 31 May/05 seen in group of 3 with calf
- 19 Jun/05 seen alone without calf
- 23 Sep/05 a problem with VHF reception
- 30 Oct/06 a problem with satellite signal reception
- 6 Feb/06 no satellite/VHF signal
- 27 Feb/07 no visual
- 30 May/07 no visual
- 15 Jun/07 collar stopped satellite transmissions